

CLAIMS

1. A method for establishing a dynamic talk group in a radio communication system having a plurality of radios each having a unique Internet Protocol (IP) address, comprising the steps of:

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- (a) selecting a set of target radios from amongst the plurality of radios by a dynamic group call originator;
 - (b) transmitting a message from the dynamic group call originator to each of the set of target radios whose IP addresses match those radios selected in step (a); and
 - (c) causing the target radios and the dynamic group call originator to establish a dynamic talk group where the dynamic group call will take place.

2. A method as defined in claim 1, wherein the dynamic group call originator comprises a radio from amongst the plurality of radios located in the radio communication system.

3. A method as defined in claim 1, wherein the message transmitted to each of the target radios in step (b) comprises a packet data message.

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4. A method as defined in claim 1, further comprising the further step of:

5 (d) transmitting an acknowledgment message to the dynamic group call originator from each of the target radios that successfully received the message transmitted in step (b).

10 5. A method as defined in claim 1, comprising the further step of:

15 (e) transmitting a dynamic talk group disconnect message by the dynamic group call originator to the target radios.

6. A method as defined in claim 5, comprising the further step of:

20 (f) disconnecting the target radios from the dynamic group call in response to step (e).

7. A method as defined in claim 1, wherein at least one of the target radios in response to step (b) transmits a
25 message to the dynamic group call originator informing it that it is not available to participate in the dynamic talk group.

8. A method for establishing a dynamic talk group in a radio communication system having a plurality of radios each having a unique Internet Protocol (IP) address, comprising the steps of:

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(a) selecting a first target radio and a second target radio from amongst the plurality of radios by a dynamic group call originator;

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(b) transmitting a first message including the first target radio's IP address from the dynamic group call originator to the first target radio and a second message including the second target radio's IP address from the dynamic group call originator to the second target radio; and

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(c) causing the first and second target radios and the dynamic group call originator to establish a dynamic talk group where a dynamic group call will take place once the dynamic group call originator has transmitted the first and second messages.

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9. A method as defined in claim 8, wherein the dynamic group call originator comprises a communication device coupled to the radio communication system.

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10. A method as defined in claim 9, wherein the communication device comprises a computer coupled to the radio communication system via a communication network.

11. A method as defined in claim 8, wherein the dynamic group call originator comprises a radio amongst the plurality of radios located in the radio communication system.

12. A method as defined in claim 8, further comprising the step of:

(d) disconnecting the dynamic talk group.

13. A method as defined in claim 12, wherein step (d) is performed by the dynamic group call originator transmitting disconnect messages to each of the first and second target radios.

14. A method as defined in claim 12, wherein the radio communication system includes a system controller and step (d) comprises the system controller sending disconnect messages to each of the first and second target radios and the dynamic group call originator.

15. A method as defined in claim 14, wherein the system controller sends the disconnect messages when it determines that the dynamic group call has exceeded a predetermined period of time.

16. A method as defined in claim 14, wherein the system controller sends the disconnect messages when it determines that a predetermined period of time has elapsed without any communication activity occurring in the dynamic talk group.